CLAIMS

What is claimed is:

1. A method of forecasting component requirements for devices being manufactured, said method comprising:

determining production quantities of said devices planned to be manufactured;

exploding each of said devices into first level components to generate required first level component volumes, wherein said first level components include assemblies;

multiplying said first level component volumes for each device by a corresponding production quantity of said production quantities to determine a total volume of first level components required, wherein said total volume of first level components includes assembly volumes;

exploding each of said assemblies into assembly components to generate required assembly component volumes for each assembly;

multiplying said assembly component volumes for each assembly by a corresponding assembly volume of said assembly volumes to determine a total volume of assembly components required; and

providing said total volume of assembly components required to assembly component manufacturers.

2. The method in claim 1, wherein said process of determining a production quantity comprises forecasting sales volumes for each of said devices.

3. The method in claim 1, wherein said devices share one or more of said components and said assemblies share one or more of said assembly components.

4. The method in claim 1, further comprising identifying substitute components.

5. The method in claim 1, wherein some of said components comprise critical components.

6. The method in claim 5, wherein said critical components comprise components having a level of supply insufficient to meet demand and having no available substitute components.

7. The method in claim 1, wherein said forecasting is performed using a minimum profile technique that removes all ordering parameters including order minimums, order maximums, leadtimes, transit times, and order sizing.

8. A method of forecasting component requirements for devices being manufactured, said method comprising:

determining production quantities of said devices planned to be manufactured;

exploding each of said devices into first level components to generate required first level component volumes, wherein said first level components include assemblies;

multiplying said first level component volumes for each device by a corresponding production quantity of said production quantities to determine a total volume of first level

components required, wherein said total volume of first level components includes assembly volumes;

exploding each of said assemblies into assembly components to generate required assembly component volumes for each assembly;

multiplying said assembly component volumes for each assembly by a corresponding assembly volume of said assembly volumes to determine a total volume of assembly components required;

identifying critical components and critical assembly components as ones having levels of supply insufficient to meet demand and having no available substitute components; and

calculating a volume of each critical component and critical assembly component required to manufacture said devices based on said total volume.

9. The method in claim 8, wherein said process of determining a production quality comprises forecasting sales volumes for each of said devices.

10. The method in claim 8, wherein said devices share one or more of said components and said assemblies share one or more of said assembly components.

11. The method in claim 8, further comprising identifying substitute components.

12. The method in claim 8, wherein said forecasting is performed using a minimum profile technique that removes all ordering parameters including order minimums, order maximums, leadtimes, transit times, and order sizing.

13. A method of forecasting component requirements for devices being manufactured, said method comprising:

determining production quantities of said devices planned to be manufactured;

exploding each of said devices into first level components to generate required first level component volumes, wherein said first level components include assemblies;

multiplying said first level component volumes for each device by a corresponding production quantity of said production quantities to determine a total volume of first level components required, wherein said total volume of first level components includes assembly volumes;

exploding each of said assemblies into assembly components to generate required assembly component volumes for each assembly; and

multiplying said assembly component volumes for each assembly by a corresponding assembly volume of said assembly volumes to determine a total volume of assembly components required,

wherein said forecasting is performed using a minimum profile technique that removes all ordering parameters including order minimums, order maximums, leadtimes, transit times, and order sizing.

14. The method in claim 13, wherein said process of determining a production quantity comprises forecasting sales volumes for each of said devices.

15. The method in claim 13, wherein said devices share one or more of said components and said assemblies share one or more of said assembly components.

16. The method in claim 13, further comprising identifying substitute components.

17. The method in claim 13, wherein some of said components comprise critical components.

18. The method in claim 17, wherein said critical components comprise components having a level of supply insufficient to meet demand and having no available substitute components.

19. A program storage device readable by machine tangibly embodying a program of instructions executable by said machine for performing a method of forecasting component requirements for devices being manufactured, said method comprising:

determining production quantities of said devices planned to be manufactured;

exploding each of said devices into first level components to generate required first level component volumes, wherein said first level components include assemblies;

multiplying said first level component volumes for each device by a corresponding production quantity of said production quantities to determine a total volume of first level

components required, wherein said total volume of first level components includes assembly volumes;

exploding each of said assemblies into assembly components to generate required assembly component volumes for each assembly;

multiplying said assembly component volumes for each assembly by a corresponding assembly volume of said assembly volumes to determine a total volume of assembly components required; and

providing said total volume of assembly components required to assembly component manufacturers.

20. The program storage device in claim 19, wherein said process of determining a production quality comprises forecasting sales volumes for each of said devices.

21. The program storage device in claim 19, wherein said devices share one or more of said components and said assemblies share one or more of said assembly components.

22. The program storage device in claim 19, further comprising identifying substitute components.

23. The program storage device in claim 19, wherein some of said components comprise critical components.

24. The program storage device in claim 23, wherein said critical components comprise components having a level of supply insufficient to meet demand and having no available substitute components.

25. The program storage device in claim 19, wherein said forecasting is performed using a minimum profile technique that removes all ordering parameters including order minimums, order maximums, leadtimes, transit times, and order sizing.